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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/374,338	08/13/1999	NORBERT WINDHAB	241/172	3614

34263 7590 06/18/2003

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EXAMINER

WESSENDORF, TERESA D

ART UNIT	PAPER NUMBER
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1639

DATE MAILED: 06/18/2003

26

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/374,338

Applicant(s)

WINDHAB ET AL.

Examiner

T. D. Wessendorf

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-137 is/are pending in the application.
- 4a) Of the above claim(s) 1-54,57 and 59-137 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 55,56 and 68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>19</u> . | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group III, claims 55-60 (page 3 of the instant REMARKS), species: Acetylcholine (Ach), Fluorescent emission, Test substrate-antagonist of Ach e.g., atropine and descriptor array-ligand binding composition peptide first and second programmable PRNA in Paper No. 23 is acknowledged. It is however noted that at page 4 of the instant REMARKS, applicants state that the election is without traverse. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-54, 57 and 59-137 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 23.

Status of Claims

~~Claims 1-137 are pending.~~

Claims 1-54, 57 and 59-137 are withdrawn from consideration, as stated above.

Claims 55, 56 and 58 are under examination.

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Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors (typographical, grammatical and/or idiomatic).

Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The claimed method lacks antecedent support from the specification.

Claim Rejections - 35 USC § 112, first paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 55, 56 and 58 are rejected under 35 U.S.C. 112,
first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to

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reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The as-filed specification does not provide a written description and/or support for the term "pharmaceutically active compound". The original disclosure describes a drug. There is no description or even a definition or constituent of the presently amended "pharmaceutically active compound".

The specification does not contain a written description of the method as recited in claims 55 and 56. There is no description in the specification of the steps or object of the recited invention. It does not provide a method as to how a response profile is created to enable determination of a test compound biological response. It further fails to describe any type of supramolecular complex that is used in the method or test substrate or a known substrate that can be attached to the array. The claim does not seem to correlate with the teachings in the disclosure, specifically the Examples.

Claim Rejections - 35 USC § 112, second paragraph

~~The following is a quotation of the second paragraph of 35~~

U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 55, 56 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A). Claim 55 is indefinite as to the intended scope of the claim, especially in the absence of positive recitation of the method in the specification. The preamble recites a method that determines the expected biological response of a substrate (molecule). The used of parenthesis in the term (molecule) is unclear as to whether the term in said parenthesis forms a part of the claim or not. The conditional phrases "may" and "definable location" fails to ascertain the claimed invention with precision. The step of "providing" is not a positive, manipulative process step. It is not clear as to the step encompassed by "providing". Steps (b) and (c) are unclear as to whether the known and test substrates are applied separately in two different arrays or in combination. The metes and bounds of "biological response", "test substrate (molecule)", "supramolecular complexes", "response profile" of the different compounds to a molecular descriptor array are not clearly set forth in the claims or specification.

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B. Claim 56 is unclear as to how a pharmaceutically active compound is determined to be as such, in the absence of positive support in the specification. The steps in claim 56 do not seem to correlate or lack nexus from one another. There is no nexus between the preamble and the body of the claim. The preamble recites for drug discovery, the body of the claim recites for predicting the expected response of the test compound. It is not clear as to the subsequent providing in series of the related compounds or the basis of the compounds being related to the molecular array. The used of inconsistent terminologies "drug", "pharmaceutically active compound", "test compound" "molecular descriptor array " and "related compound" to mean the same thing provides for confusion and ambiguity. See the rejection under A for the rejection of "providing" and "definable". Furthermore, it is not clear as to the metes and bounds of a "plurality of definable locations".

C. Claim 58 is unclear as to the recited "antagonist" of the related compound. It is not clear in the context of the claim as to how the compounds of the molecular descriptor array ~~are considered to be an antagonist. The base claim does not~~ recite for said antagonist or step to correlate to an antagonist compound of a molecular descriptor array.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 55, 56 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' disclosure of known prior art in view of Cubicciotti et al (US 6,287,765).

Applicants disclose at page 4, line 8 up to page 6, line 25 that ".....multiple sample nucleic acid hybridization analysis has been conducted on a variety of filter and solid support formats.....another format... Involves attaching oligonucleotide probes covalently to a solid support and using them to capture and detect multiple nucleic acids targets.....Southern also described a method for synthesizing an array of oligonucleotides on a solid support for SBH...." The references disclosed by applicants do not disclose a method by which a supramolecular complexes is attached to the array. Cubicciotti et al discloses at e.g., col. 24, Example 16 a supramolecular complexes linked to an array. Cubicciotti further discloses at col. 1, lines 50-61

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that supramolecular assemblies perform complex functions through concerted interaction of the constituent molecules. It would have been obvious to one having ordinary skill in the art at the time the invention was made to attach a supramolecular complexes in the method of each of the references cited by applicants in a manner as taught by Cubicciotti. The motivation for one having ordinary skill in the art to attach a supramolecular complex in an array is the function of complexes via concerted interaction to individual or constituent molecules present in e.g., biological samples.

The elected species are free of prior art.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. D. Wessendorf whose telephone number is (703) 308-3967. The examiner can normally be reached on Flexitime.

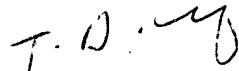
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (703) 306-3217. The fax phone numbers for the ~~organization where this application or proceeding is assigned~~ are (703) 308-7924 for regular communications and (703) 308-7924 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.


T. D. Wessendorf
Primary Examiner
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tdw

June 16, 2003
